Appendix C:

A Study of Intertidal-Wetland Restoration in Puget Sound Summary

A STUDY OF INTERTIDAL-WETLAND RESTORATION IN PUGET SOUND

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With funding from the National Oceanic and Atmospheric Administration provided by the Washington State Sea Grant Program, we are undertaking a study of intertidal wetland restoration in Puget Sound. This project includes the following facets:

1) A literature review of publications relevant to the autecology and synecology of intertidal plant species, cultivation and propagation of these species, and restoration. A complete reference list will be compiled in an electronic database and the most relevant publications will be annotated in a separate bibliography. Objectives of this technical review are to identify gaps in our knowledge of plant species distribution across environmental gradients, to identify possible propagation methods and planting procedures for species and plant communities, and evidence of factors affecting successful establishment of species.

2) An inventory of intertidal-marsh restoration sites in the Puget Sound where development of intertidal vegetation was a defined objective. Information collected includes the location, habitat type (i.e., salt, brackish, or freshwater intertidal marsh), date restoration efforts commenced, responsible party, restoration techniques used, monitoring protocols, and evidence of successes and failures.

3) A sampling design and methods plan. At chosen restoration sites, transects will be placed perpendicular to environmental gradients. Along these transects, plots will be used to assess vegetation cover and five environmental factors: salinity, surface elevation relative to tidal datum, sediment particle size, redox potential, and proportion of organic matter in sediments.

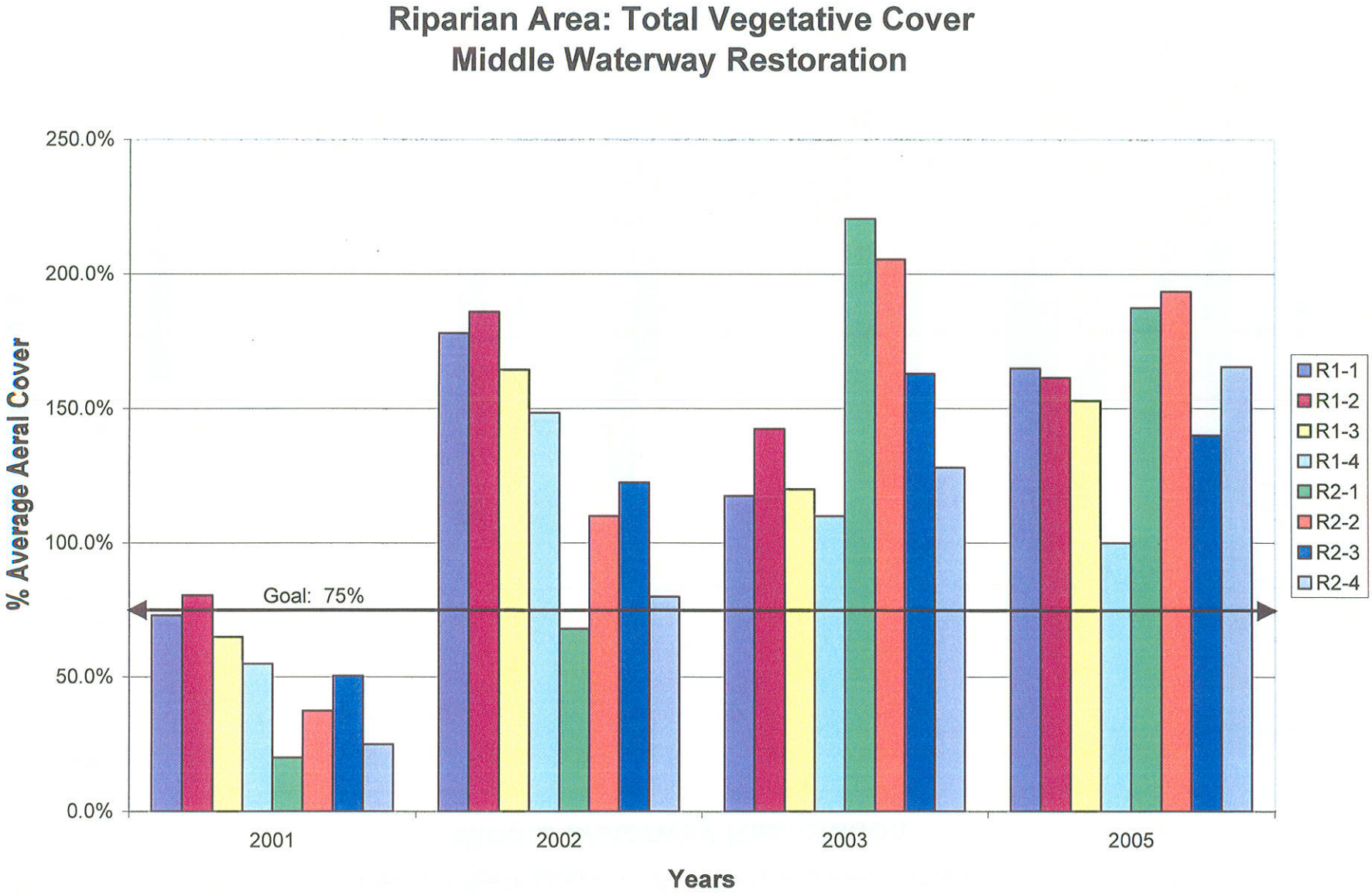
4) Statistical evaluation of environmental gradients relative to species success.

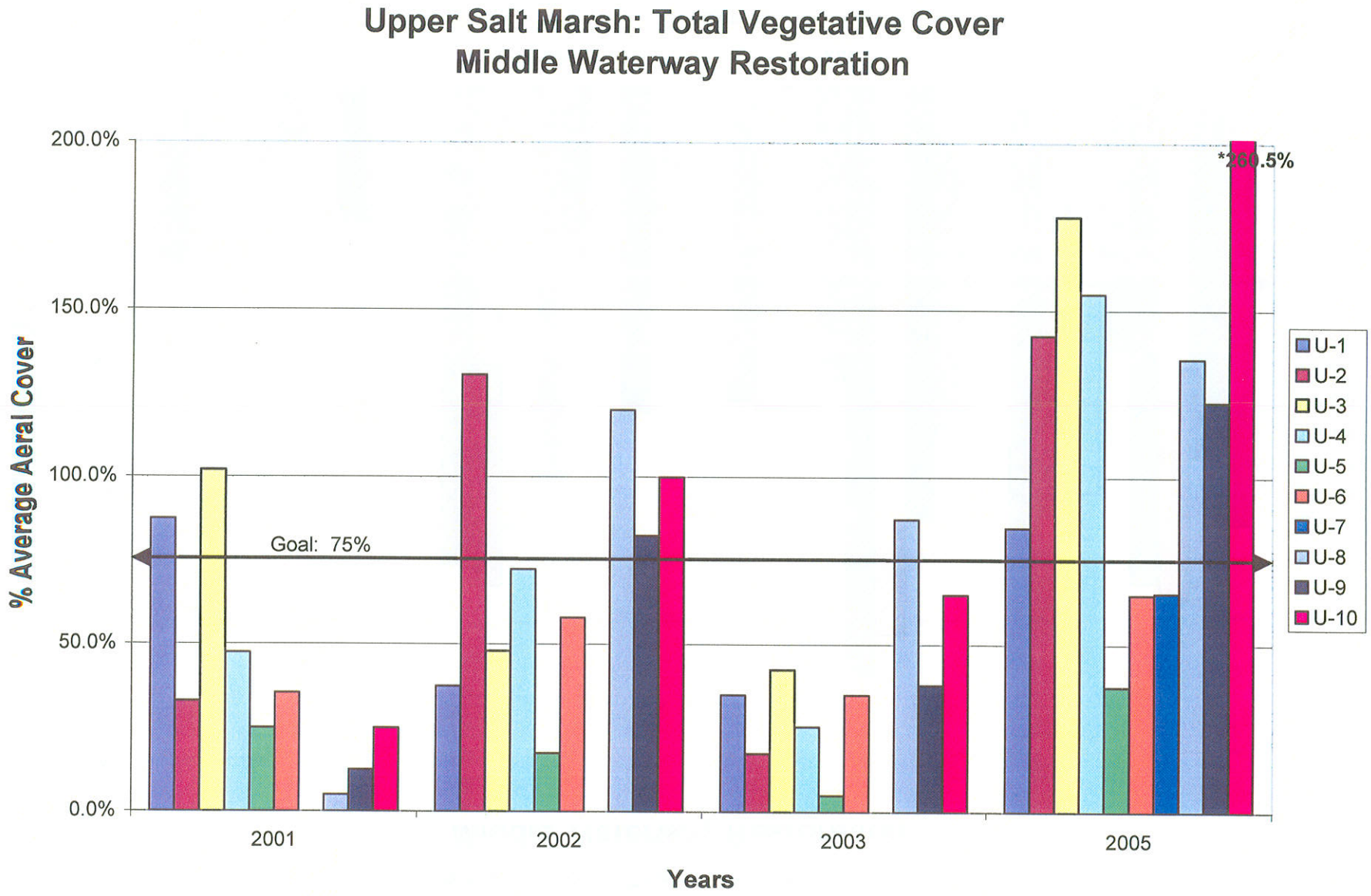
5) Recommendations for marsh restoration and monitoring.

The ultimate goal of the project is to create a central database for those who are interested in undertaking intertidal marsh restoration projects. We hope that the database will evolve as more of these projects are completed in Puget Sound.

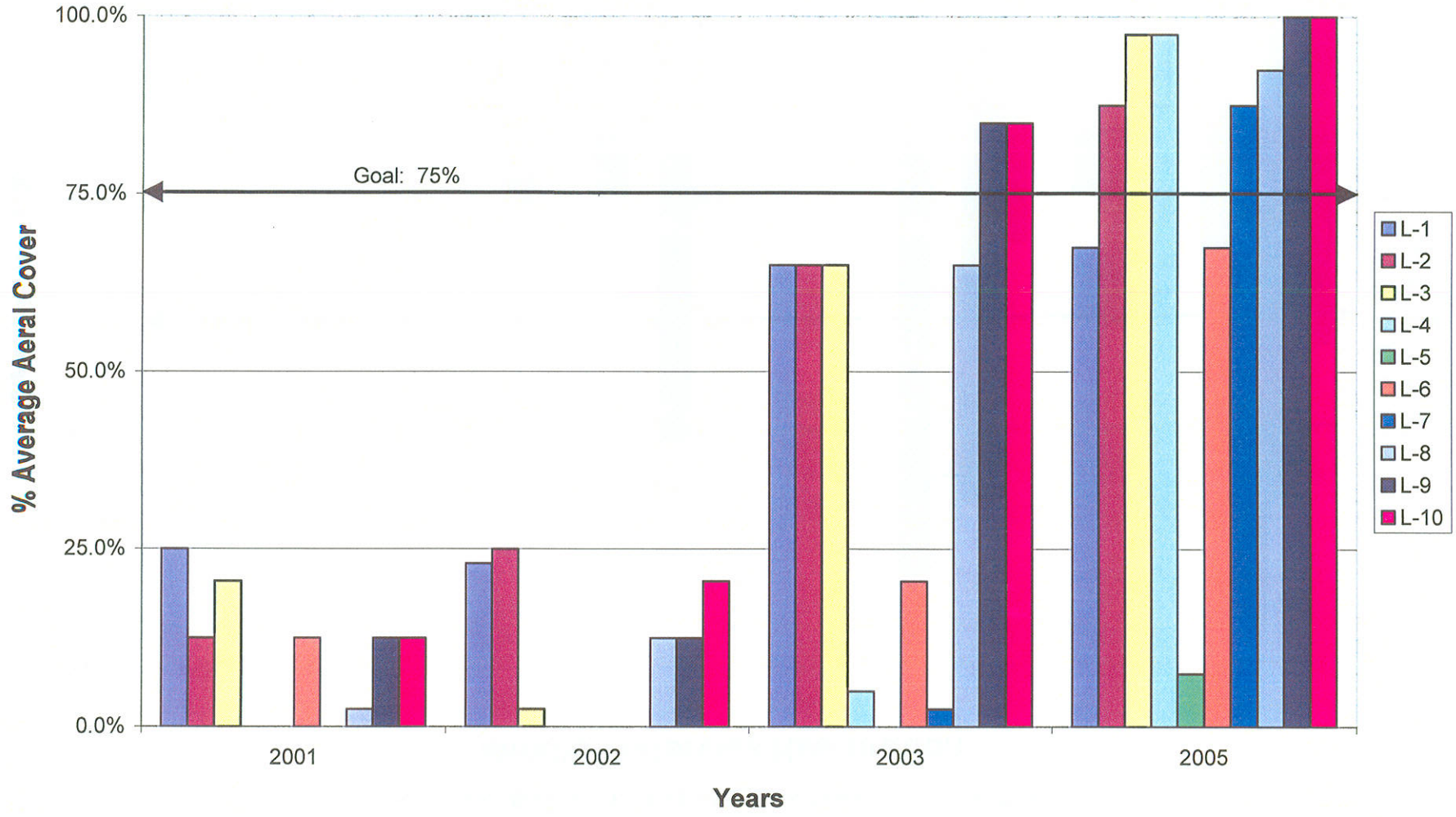
Appendix D:

5 year look at Total Vegetative Cover and Total Native Vegetative Cover by Habitat Area

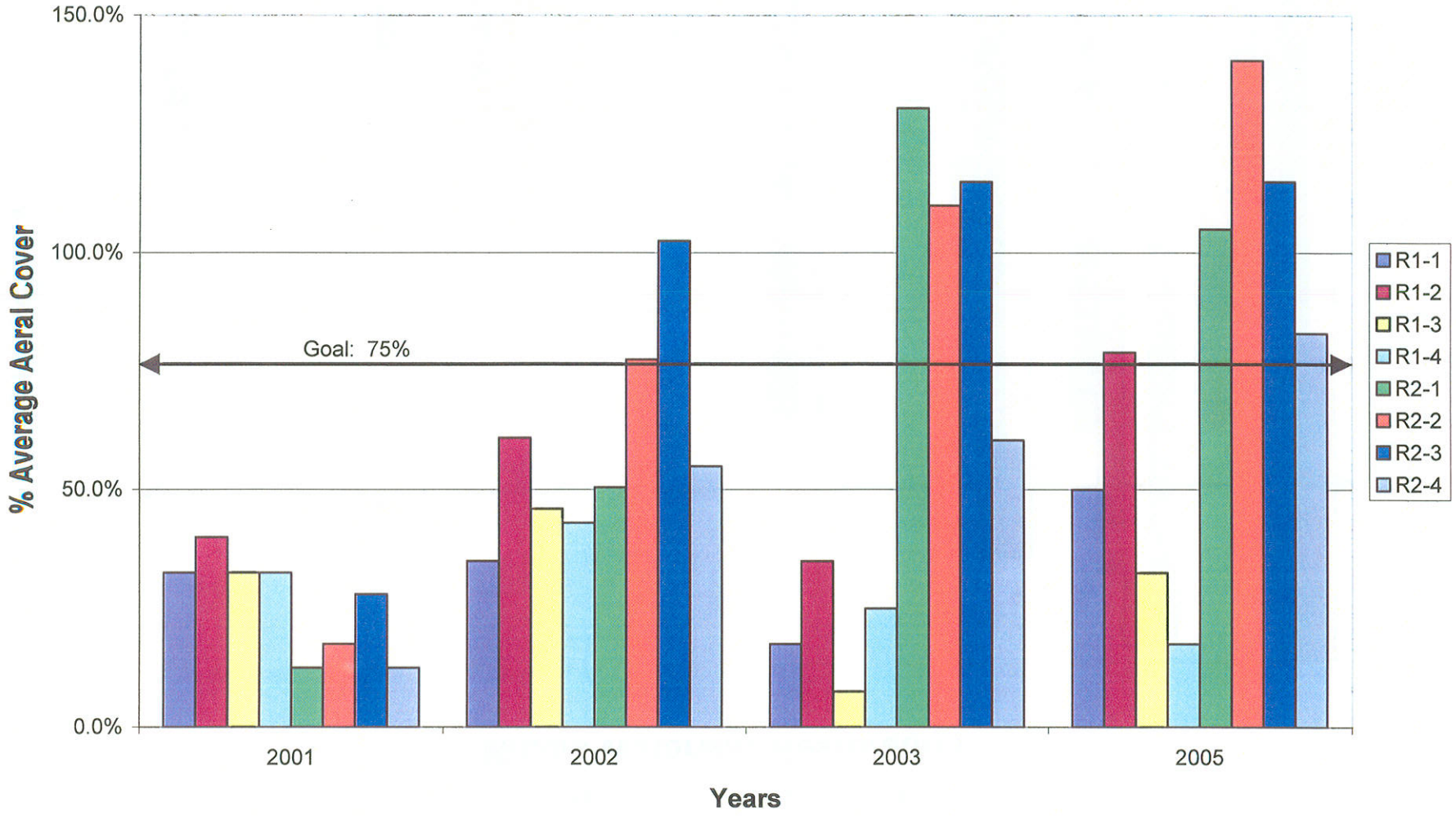

Riparian Area: Total Vegetative Cover
Middle Waterway Restoration
250.0%
200.0%
150.0%
100.0%
50.0%
0.0%
% Average Aeral Cover
Goal: 75%
2001
2002
2003
2005
Years
R1-1
R1-2
R1-3
R1-4
R2-1
R2-2
R2-3
R2-4


Upper Salt Marsh: Total Vegetative Cover
Middle Waterway Restoration
200.0%
150.0%
100.0%
50.0%
0.0%
% Average Aeral Cover
Goal: 75%
*260.5%
2001
2002
2003
2005
Years
U-1
U-2
U-3
U-4
U-5
U-6
U-7
U-8
U-9
U-10

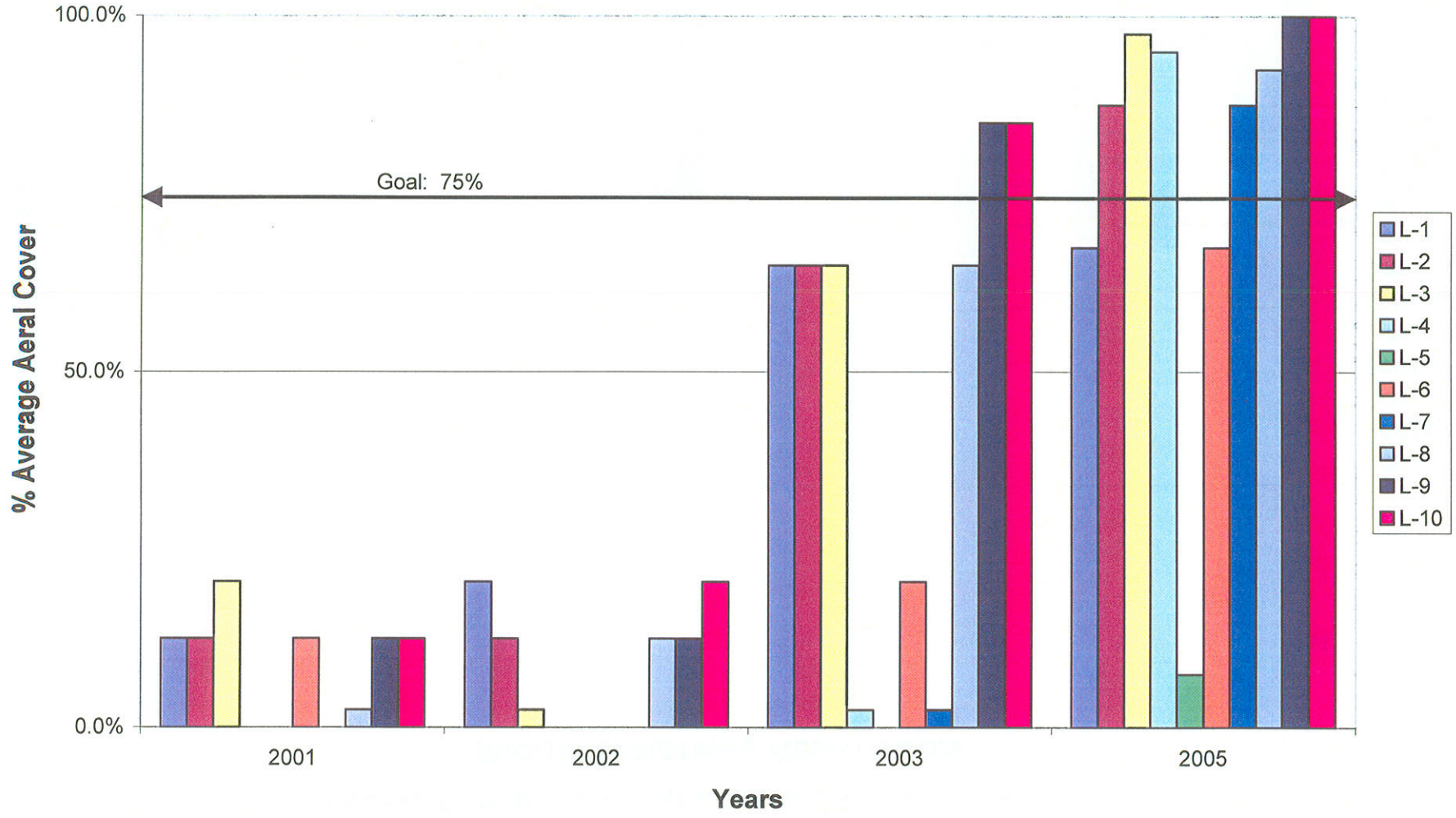
Lower Salt Marsh: Total Vegetative Cover
Middle Waterway Restoration



Riparian Area: Total Native Vegetative Cover
Middle Waterway Restoration



Lower Salt Marsh: Total Native Vegetative Cover
Middle Waterway Restoration



Upper Salt Marsh: Total Native Vegetative Cover
Middle Waterway Restoration